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RAW SEQUENCE LISTING

DATE: 01/26/2002

PATENT APPLICATION: US/09/927,161

TIME: 16:14:26

Input Set : A:\GC-627-2-SEQLIST.TXT

Output Set: N:\CRF3\01262002\I927161.raw

4 <110> APPLICANT: Schellenberger, Volker
 5 Selifonova, Olga
 6 Diaz-Torres, Maria
 7 Morrison, Thomas
 8 Lee, Edwin W.
 10 <120> TITLE OF INVENTION: Bacillus Transformation, Transformants
 11 and Mutant Libraries
 13 <130> FILE REFERENCE: GC627-2
 15 <140> CURRENT APPLICATION NUMBER: US 09/927,161
 16 <141> CURRENT FILING DATE: 2001-08-10
 18 <150> PRIOR APPLICATION NUMBER: US 60/224,948
 19 <151> PRIOR FILING DATE: 2000-08-11
 21 <160> NUMBER OF SEQ ID NOS: 34
 23 <170> SOFTWARE: FastSEQ for Windows Version 4.0
 25 <210> SEQ ID NO: 1
 26 <211> LENGTH: 45
 27 <212> TYPE: DNA
 28 <213> ORGANISM: Artificial Sequence
 30 <220> FEATURE:
 31 <223> OTHER INFORMATION: primer
 33 <400> SEQUENCE: 1
 34 ggcgcgcaagc tttgtctcag aaataactcct agaataaaaa aactc
 36 <210> SEQ ID NO: 2
 37 <211> LENGTH: 50
 38 <212> TYPE: DNA
 39 <213> ORGANISM: Artificial Sequence
 41 <220> FEATURE:
 42 <223> OTHER INFORMATION: primer
 44 <400> SEQUENCE: 2
 45 ggtgcggtctg ttttctgact catgtgattt cccctttaa aataaattca
 47 <210> SEQ ID NO: 3
 48 <211> LENGTH: 50
 49 <212> TYPE: DNA
 50 <213> ORGANISM: Artificial Sequence
 52 <220> FEATURE:
 53 <223> OTHER INFORMATION: primer
 55 <400> SEQUENCE: 3
 56 tgaatttatt ttaaggggg aaatcacatg agtcagaaaa cagacgcacc
 58 <210> SEQ ID NO: 4
 59 <211> LENGTH: 40
 60 <212> TYPE: DNA
 61 <213> ORGANISM: Artificial Sequence
 63 <220> FEATURE:

ENTERED

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64 <223> OTHER INFORMATION: primer
66 <400> SEQUENCE: 4
67 gcgcgctcta gaggtatatg gcatcaccgg aggaattccg      40
69 <210> SEQ ID NO: 5
70 <211> LENGTH: 30
71 <212> TYPE: DNA
72 <213> ORGANISM: Artificial Sequence
74 <220> FEATURE:
75 <223> OTHER INFORMATION: primer
77 <400> SEQUENCE: 5
78 atatgtggtg ccgaaacgct ctggggtaac      30
80 <210> SEQ ID NO: 6
81 <211> LENGTH: 39
82 <212> TYPE: DNA
83 <213> ORGANISM: Artificial Sequence
85 <220> FEATURE:
86 <223> OTHER INFORMATION: primer
88 <400> SEQUENCE: 6
89 gacttactta aaagactatt ctgtcatgca gctgcaatc      39
91 <210> SEQ ID NO: 7
92 <211> LENGTH: 39
93 <212> TYPE: DNA
94 <213> ORGANISM: Artificial Sequence
96 <220> FEATURE:
97 <223> OTHER INFORMATION: primer
99 <400> SEQUENCE: 7
100 gattgcagct gcatgacaga atagtctttt aagtaagtc      39
102 <210> SEQ ID NO: 8
103 <211> LENGTH: 26
104 <212> TYPE: DNA
105 <213> ORGANISM: Artificial Sequence
107 <220> FEATURE:
108 <223> OTHER INFORMATION: primer
110 <400> SEQUENCE: 8
111 ctaattcccc atggcactga ttgcgc      26
113 <210> SEQ ID NO: 9
114 <211> LENGTH: 26
115 <212> TYPE: DNA
116 <213> ORGANISM: Artificial Sequence
118 <220> FEATURE:
119 <223> OTHER INFORMATION: primer
121 <400> SEQUENCE: 9
122 gcgcaatcag tgccatgggg aattag      26
124 <210> SEQ ID NO: 10
125 <211> LENGTH: 30
126 <212> TYPE: DNA
127 <213> ORGANISM: Artificial Sequence
129 <220> FEATURE:
130 <223> OTHER INFORMATION: primer

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132 <400> SEQUENCE: 10
133 cttttcttca tgcgccgtca gctttttctc 30
135 <210> SEQ ID NO: 11
136 <211> LENGTH: 20
137 <212> TYPE: DNA
138 <213> ORGANISM: Artificial Sequence
140 <220> FEATURE:
141 <223> OTHER INFORMATION: primer
143 <400> SEQUENCE: 11
144 ccttgcaaatt cgatgcctg 20
146 <210> SEQ ID NO: 12
147 <211> LENGTH: 25
148 <212> TYPE: DNA
149 <213> ORGANISM: Artificial Sequence
151 <220> FEATURE:
152 <223> OTHER INFORMATION: primer
154 <400> SEQUENCE: 12
155 cgctgttatt gcttttgttt tctgt 25
157 <210> SEQ ID NO: 13
158 <211> LENGTH: 23
159 <212> TYPE: DNA
160 <213> ORGANISM: Artificial Sequence
162 <220> FEATURE:
163 <223> OTHER INFORMATION: primer
165 <400> SEQUENCE: 13
166 gttggataga gctgggtaaa gcc 23
168 <210> SEQ ID NO: 14
169 <211> LENGTH: 24
170 <212> TYPE: DNA
171 <213> ORGANISM: Artificial Sequence
173 <220> FEATURE:
174 <223> OTHER INFORMATION: primer
176 <400> SEQUENCE: 14
177 cgccggattt tatgtcattg ataa 24
179 <210> SEQ ID NO: 15
180 <211> LENGTH: 23
181 <212> TYPE: DNA
182 <213> ORGANISM: Artificial Sequence
184 <220> FEATURE:
185 <223> OTHER INFORMATION: primer
187 <400> SEQUENCE: 15
188 agccgttttg ctcatcaag ctt 23
190 <210> SEQ ID NO: 16
191 <211> LENGTH: 20
192 <212> TYPE: DNA
193 <213> ORGANISM: Artificial Sequence
195 <220> FEATURE:
196 <223> OTHER INFORMATION: primer
198 <400> SEQUENCE: 16

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```

199 tgaagtgaac atgtcagaaa                                20
201 <210> SEQ ID NO: 17
202 <211> LENGTH: 20
203 <212> TYPE: DNA
204 <213> ORGANISM: Artificial Sequence
206 <220> FEATURE:
207 <223> OTHER INFORMATION: primer
209 <400> SEQUENCE: 17
210 atagcttgtc gcgateacct                                20
212 <210> SEQ ID NO: 18
213 <211> LENGTH: 20
214 <212> TYPE: DNA
215 <213> ORGANISM: Artificial Sequence
217 <220> FEATURE:
218 <223> OTHER INFORMATION: primer
220 <400> SEQUENCE: 18
221 tttttgcaga ccgttggttt                                20
223 <210> SEQ ID NO: 19
224 <211> LENGTH: 20
225 <212> TYPE: DNA
226 <213> ORGANISM: Artificial Sequence
228 <220> FEATURE:
229 <223> OTHER INFORMATION: primer
231 <400> SEQUENCE: 19
232 cgcgacacag cagttcagca                                20
234 <210> SEQ ID NO: 20
235 <211> LENGTH: 20
236 <212> TYPE: DNA
237 <213> ORGANISM: Artificial Sequence
239 <220> FEATURE:
240 <223> OTHER INFORMATION: primer
242 <400> SEQUENCE: 20
243 tatcattttt gcttaatttg                                20
245 <210> SEQ ID NO: 21
246 <211> LENGTH: 35
247 <212> TYPE: DNA
248 <213> ORGANISM: Artificial Sequence
250 <220> FEATURE:
251 <223> OTHER INFORMATION: primer
253 <221> NAME/KEY: misc_feature
254 <222> LOCATION: (16)...(17)
255 <223> OTHER INFORMATION: n = A,T,C or G
257 <400> SEQUENCE: 21
258 gaagaggatg cagaannsac gacaatggcg caatc                35
260 <210> SEQ ID NO: 22
261 <211> LENGTH: 35
262 <212> TYPE: DNA
263 <213> ORGANISM: Artificial Sequence
265 <220> FEATURE:

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266 <223> OTHER INFORMATION: primer
 268 <221> NAME/KEY: misc_feature
 269 <222> LOCATION: (19)...(20)
 270 <223> OTHER INFORMATION: n = A,T,C or G
 272 <400> SEQUENCE: 22
 OK-> 273 gattgcgcca ttgtcgtsnn ttctgcatcc tcttc 35
 275 <210> SEQ ID NO: 23
 276 <211> LENGTH: 34
 277 <212> TYPE: DNA
 278 <213> ORGANISM: Artificial Sequence
 280 <220> FEATURE:
 281 <223> OTHER INFORMATION: primer
 283 <221> NAME/KEY: misc_feature
 284 <222> LOCATION: (16)...(17)
 285 <223> OTHER INFORMATION: n = A,T,C or G
 287 <400> SEQUENCE: 23
 OK-> 288 gaggatgcag aagtannsac aatggcgcaa tcag 34
 290 <210> SEQ ID NO: 24
 291 <211> LENGTH: 34
 292 <212> TYPE: DNA
 293 <213> ORGANISM: Artificial Sequence
 295 <220> FEATURE:
 296 <223> OTHER INFORMATION: primer
 298 <221> NAME/KEY: misc_feature
 299 <222> LOCATION: (18)...(19)
 300 <223> OTHER INFORMATION: n = A,T,C or G
 302 <400> SEQUENCE: 24
 OK-> 303 ctgattgcgc cattgtsnnt acttctgcat cctc 34
 305 <210> SEQ ID NO: 25
 306 <211> LENGTH: 33
 307 <212> TYPE: DNA
 308 <213> ORGANISM: Artificial Sequence
 310 <220> FEATURE:
 311 <223> OTHER INFORMATION: primer
 313 <221> NAME/KEY: misc_feature
 314 <222> LOCATION: (16)...(17)
 315 <223> OTHER INFORMATION: n = A,T,C or G
 317 <400> SEQUENCE: 25
 OK-> 318 gatgcagaag taacgnnsat ggcgcaatca gtg 33
 320 <210> SEQ ID NO: 26
 321 <211> LENGTH: 33
 322 <212> TYPE: DNA
 323 <213> ORGANISM: Artificial Sequence
 325 <220> FEATURE:
 326 <223> OTHER INFORMATION: primer
 328 <221> NAME/KEY: misc_feature
 329 <222> LOCATION: (17)...(18)
 330 <223> OTHER INFORMATION: n = A,T,C or G
 332 <400> SEQUENCE: 26

Use of n and/or Xaa has been detected in the Sequence Listing.
 Review the Sequence Listing to insure a corresponding
 explanation is presented in the <220> to <223> fields of
 each sequence using n or Xaa.

VERIFICATION SUMMARY

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Input Set : A:\GC-627-2-SEQLIST.TXT

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L:258 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21
L:273 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22
L:288 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23
L:303 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24
L:318 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25
L:333 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26